

=> file reg

FILE 'REGISTRY' ENTERED AT 15:38:42 ON 27 SEP 2005

=> d his full

(FILE 'HOME' ENTERED AT 10:59:30 ON 27 SEP 2005)

FILE 'REGISTRY' ENTERED AT 11:08:14 ON 27 SEP 2005

L5 4 SEA ABB=ON PLU=ON (116141-66-3/BI OR 1318-23-6/BI OR
1344-28-1/BI OR 672287-82-0/BI)

FILE 'LREGISTRY' ENTERED AT 14:11:58 ON 27 SEP 2005

L13 STRUCTURE
L14 STR
L15 QUE L14

FILE 'REGISTRY' ENTERED AT 14:24:47 ON 27 SEP 2005

D SAV
ACT SCH466/A

L16 STR
L17 12 SEA SSS FUL L16

L23 1 SEA SUB=L17 SSS FUL L13
SAV L23 SCH466A/A

FILE 'HCAPLUS' ENTERED AT 14:58:34 ON 27 SEP 2005

L31 1867266 SEA ABB=ON PLU=ON STABL? OR STABILIS? OR STABILIZ? OR
STABILITY OR STORE# OR STORING# OR STORAGE?
L32 591407 SEA ABB=ON PLU=ON RECORD? OR PRINT?
L33 26453 SEA ABB=ON PLU=ON INK (2A) JET
L34 1 SEA ABB=ON PLU=ON L17 AND (31 OR L32 OR L33)
D SCAN

FILE 'CAOLD' ENTERED AT 15:22:03 ON 27 SEP 2005

L35 0 SEA ABB=ON PLU=ON L17 AND (L31 OR L32 OR L33)

FILE 'HCAPLUS' ENTERED AT 15:22:58 ON 27 SEP 2005

L36 5 SEA ABB=ON PLU=ON L17 AND (L31 OR L32 OR L33)

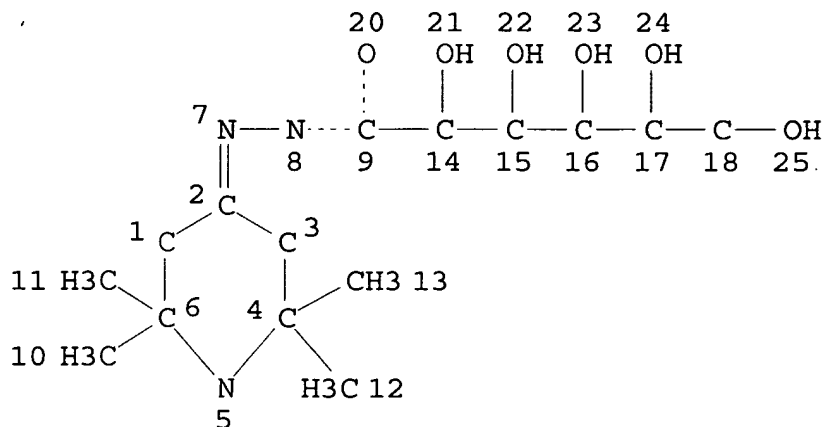
FILE 'HCAPLUS' ENTERED AT 15:33:47 ON 27 SEP 2005

L38 1 SEA ABB=ON PLU=ON L17 AND INK?
L39 5 SEA ABB=ON PLU=ON L36 OR L38

FILE 'REGISTRY' ENTERED AT 15:38:42 ON 27 SEP 2005

=> d l13 que stat

L13 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE

=> file hcaplus

FILE 'HCAPLUS' ENTERED AT 15:39:16 ON 27 SEP 2005

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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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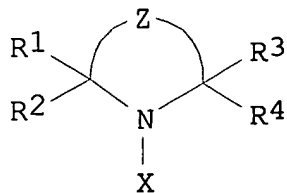
=> d l27 1 cbib abs hitstr hitind

L27 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN

2004:212021 Document No. 140:278438 Ink jet recording material and light-stabilizing agent. Loccufier, Johan; Lingier, Stefaan

(Agfa-Gevaert, Belg.). Eur. Pat. Appl. EP 1398166 A1 20040317, 31 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK. (English). CODEN: EPXXDW. APPLICATION: EP 2003-102692 20030904. PRIORITY: EP 2002-102340 20020911.

GI



I

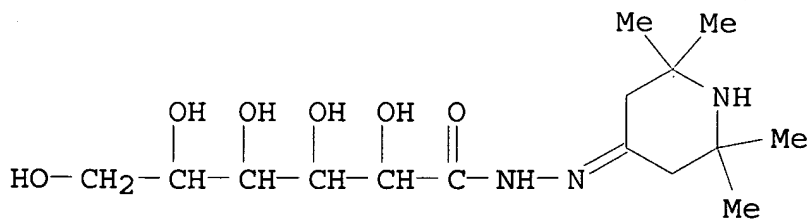
AB An ink jet recording material is disclosed comprising a support and at least one binder contg. ink-receiving layer, further contg. a light-stabilizing compd. according to general formula: A-L-R (A = formula I (Z = necessary atoms to complete a 5 or 6 membered ring; R1-4 =C1-6 aliph. group; X = H, aliph. group, acyl, oxy radical, hydroxyl, alkoxy group, OSO₂-alkyl, acyloxy group); L = divalent linking group, linked to the 5 or 6 membered ring by one of the atoms of Z, optionally by a double bond, characterized in that said divalent linking group comprises a nitrogen-nitrogen or nitrogen-oxygen bond; R = non arom. moiety comprising at least two hydroxyl groups). The finished ink jet image shows an improved light-fastness.

IT 672287-82-0

RL: TEM (Technical or engineered material use); USES (Uses)
(ink jet recording material and light-stabilizing agent)

RN 672287-82-0 HCAPLUS

CN Hexonic acid, (2,2,6,6-tetramethyl-4-piperidinylidene)hydrazide
(9CI) (CA INDEX NAME)



IC ICM B41M005-00

ICS C07D211-72; C07D211-62; C07D211-94; C07D211-58; C07D207-16;
C07D405-12; C07D405-14

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 672287-82-0

RL: TEM (Technical or engineered material use); USES (Uses)

(ink jet recording material and light-stabilizing agent)

=> d 139 1-5 cbib abs hitstr hitind

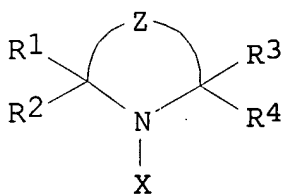
L39 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN

2004:212021 Document No. 140:278438 **Ink jet**

recording material and light-stabilizing agent.

Loccufier, Johan; Lingier, Stefaan (Agfa-Gevaert, Belg.). Eur. Pat. Appl. EP 1398166 A1 20040317, 31 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK. (English). CODEN: EPXXDW. APPLICATION: EP 2003-102692 20030904. PRIORITY: EP 2002-102340 20020911.

GI



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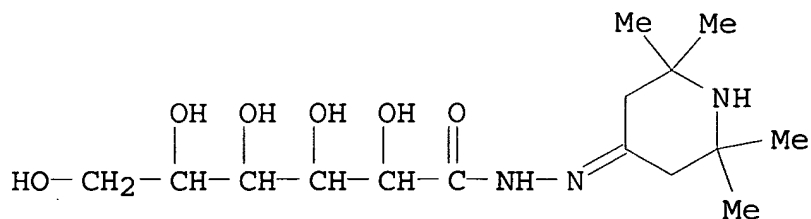
AB An **ink jet recording material** is disclosed comprising a support and at least one binder contg. **ink-receiving layer**, further contg. a light-**stabilizing** compd. according to general formula: A-L-R (A = formula I (Z = necessary atoms to complete a 5 or 6 membered ring; R1-4 =C1-6 aliph. group; X = H, aliph. group, acyl, oxy radical, hydroxyl, alkoxy group, OSO2-alkyl, acyloxy group); L = divalent linking group, linked to the 5 or 6 membered ring by one of the atoms of Z, optionally by a double bond, characterized in that said divalent linking group comprises a nitrogen-nitrogen or nitrogen-oxygen bond; R = non arom. moiety comprising at least two hydroxyl groups). The finished **ink jet** image shows an improved light-fastness.

IT 672287-82-0

RL: TEM (Technical or engineered material use); USES (Uses)
(**ink jet recording material and light-stabilizing agent**)

RN 672287-82-0 HCAPLUS

CN Hexonic acid, (2,2,6,6-tetramethyl-4-piperidinyldene)hydrazide
(9CI) (CA INDEX NAME)



- IC ICM B41M005-00
ICS C07D211-72; C07D211-62; C07D211-94; C07D211-58; C07D207-16;
C07D405-12; C07D405-14
- CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and
Other Reprographic Processes)
- ST **ink jet recording material light
stabilizing agent**
- IT **Ink-jet printing
Light stabilizers**
(ink jet recording material and
light-stabilizing agent)
- IT **Ink-jet recording sheets**
(paper; ink jet recording material
and light-stabilizing agent)
- IT Paper
(printing, ink-jet; ink
jet recording material and light-
stabilizing agent)
- IT **672287-82-0**
RL: TEM (Technical or engineered material use); USES (Uses)
(ink jet recording material and
light-stabilizing agent)
- IT 1318-23-6, Disperal P3 1344-28-1, Cab-o-Sperse PG003, uses
116141-66-3, Gohsefimer K210
RL: TEM (Technical or engineered material use); USES (Uses)
(ink jet recording material contg.
light-stabilizing agent and)
- L39 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN
1995:487828 Document No. 122:215586 Derivatives of amic acid
hydrazides containing hindered amine groups as light
stabilizers. MacLeay, Ronald E.; Lange, Harold C. (Elf
Atochem North America, Inc., USA). U.S. US 5338853 A 19940816, 39
pp. Cont.-in-part of U.S. Ser. No. 455,219, abandoned. (English).
CODEN: USXXAM. APPLICATION: US 1991-793741 19911118. PRIORITY: US
1989-455219 19891222.
- AB The title derivs. contain 1-2 N-(2,2,6,6-tetraalkyl-4-
piperidinyl)amino groups (optionally substituted) and are useful as

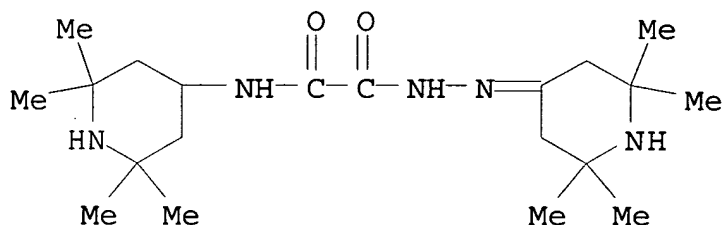
light **stabilizers** which have low volatility and good resistance to migration or extn. from polymers. Reacting RNHCOCONHNH₂ (R = 2,2,6,6-tetramethyl-4-piperidiny) with BuNCO gave RNHCOCONHNHCONHBu which was used as a light **stabilizer** for polypropene.

IT **136145-15-8P**

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); PREP (Preparation); USES (Uses)
(prepn. and use as light **stabilizer**)

RN 136145-15-8 HCAPLUS

CN Acetic acid, oxo[(2,2,6,6-tetramethyl-4-piperidiny)amino]-, (2,2,6,6-tetramethyl-4-piperidinylidene)hydrazide (9CI) (CA INDEX NAME)



IC ICM C08K005-3432

ICS C07D211-56; C07D211-30

INCL 546224000

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 27

ST piperidine hydrazide amic acid light **stabilizer**; amine hindered hydrazide light **stabilizer**; polypropene light **stabilizer** piperidine hydrazide; oxamide hydrazide piperidiny light **stabilizer**; piperidinyloxamide hydrazide light **stabilizer**

IT Amides, preparation

Hydrazides

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); PREP (Preparation); USES (Uses)

(tetramethylpiperidiny) derivs. of amic acid hydrazides as light **stabilizers**)

IT Polymers, miscellaneous

RL: MSC (Miscellaneous)

(tetramethylpiperidiny) derivs. of amic acid hydrazides as light **stabilizers** for)

IT Light **stabilizers**

(tetramethylpiperidiny) derivs. of amic acid hydrazides; prepn. and use in polymers)

IT Amines, preparation

RL: IMF (Industrial manufacture); MOA (Modifier or additive use);
 PRP (Properties); PREP (Preparation); USES (Uses)
 (hindered, tetramethylpiperidinyI derivs. of amic acid hydrazides
 as light **stabilizers**)

IT 136122-94-6P 136122-95-7P 136122-96-8P 136122-97-9P
 136122-98-0P 136122-99-1P 136123-02-9P 136123-03-0P
 136123-06-3P 136123-07-4P 136123-08-5P 136123-11-0P
 136123-12-1P 136123-13-2P 136123-14-3P 136123-15-4P
 136123-18-7P 136123-19-8P 136123-20-1P 136123-21-2P
 136123-22-3P 136123-23-4P 136123-24-5P 136123-25-6P
 136123-27-8P 136123-28-9P 136123-29-0P 136123-30-3P
 136123-31-4P 136123-33-6P 136123-34-7P 136123-35-8P
 136123-36-9P 136123-37-0P 136123-38-1P 136123-39-2P
 136145-13-6P 136145-14-7P **136145-15-8P** 136145-16-9P
 136145-17-0P 162207-83-2P 162207-84-3P 162207-85-4P
 162207-86-5P 162207-87-6P 162207-88-7P 162207-89-8P
 162207-90-1P 162207-91-2P 162207-92-3P 162207-93-4P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use);
 PRP (Properties); PREP (Preparation); USES (Uses)
 (prepn. and use as light **stabilizer**)

IT 2461-15-6DP, 2-Ethylhexyl glycidyl ether, reaction products with
 N-amino-N'-(tetramethylpiperidinyI)oxamide 122035-71-6DP, reaction
 products with ethylhexyl glycidyl ether

RL: IMF (Industrial manufacture); MOA (Modifier or additive use);
 PRP (Properties); PREP (Preparation); USES (Uses)
 (prepn. and use as light **stabilizers**)

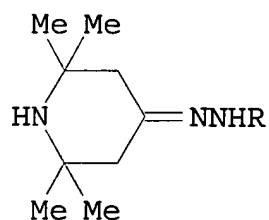
IT 25085-53-4, Himont 6501

RL: MSC (Miscellaneous)
 (tetramethylpiperidinyI derivs. of amic acid hydrazides as light
stabilizers for)

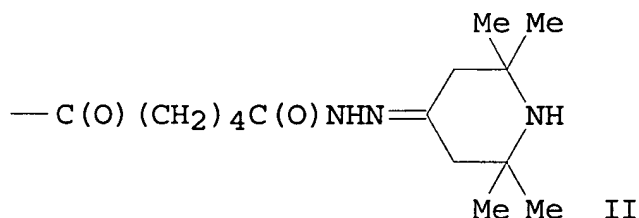
L39 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN

1992:430269 Document No. 117:30269 Silicone-based lubricating grease.
 Nikolaev, V. N.; Galimzyanova, E. G.; Matveeva, T. M.; Bagrov, F.
 V.; Gumerova, K. Z. (Chuvash State University, USSR). U.S.S.R. SU
 1659454 A1 19910630 From: Otkrytiya, Izobret. 1991, (24), 95.
 (Russian). CODEN: URXXAF. APPLICATION: SU 1989-4714575 19890531.

GI



I



II

AB To increase thermal oxidn. **stability**, the lubricating grease contains Aerosil 10-12 wt.%, and triacetoneamine hydrazone having the formula (I) [R = -C(O)CH₂Ph, -PO(OPh)₂, or (II)] 0.3-0.5 wt.% in addn. to polyethylsiloxane liq. as the balance.

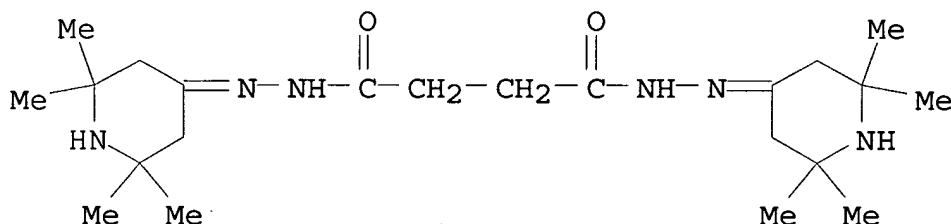
IT 142136-40-1

RL: USES (Uses)

(lubricating grease contg., with high thermal **stability**)

RN 142136-40-1 HCAPLUS

CN Butanedioic acid, bis[(2,2,6,6-tetramethyl-4-piperidinyldene)hydrazide] (9CI) (CA INDEX NAME)



IC ICM C10M169-06

ICI C10M169-06, C10M113-12, C10M107-50, C10M133-40; C10N030-06

CC 51-8 (Fossil Fuels, Derivatives, and Related Products)

IT Aerosols

Hydrazones

RL: USES (Uses)

(lubricating grease contg., with high thermal **stability**)

IT Siloxanes and Silicones, uses

RL: USES (Uses)

(polyethyl-, lubricating grease contg., with high thermal **stability**)

IT Lubricating greases

(silicone-based, with high thermal **stability**)

IT 37762-38-2 138934-99-3 142136-40-1

RL: USES (Uses)

(lubricating grease contg., with high thermal **stability**)

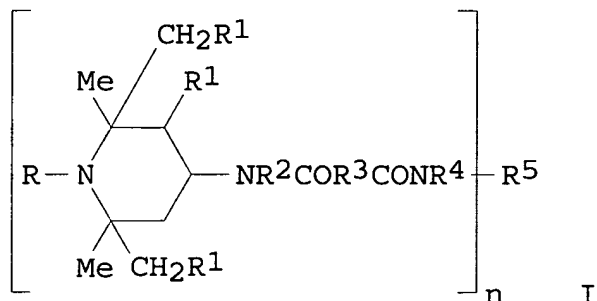
L39 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN

1991:558977 Document No. 115:158977 Preparation of

N-(2,2,6,6-tetraalkyl-4-piperidinyldene)amic acid hydrazides as heat or light **stabilizers**. MacLeay, Ronald Edward; Lange, Harold Carl (Atochem North America, Inc., USA). Eur. Pat. Appl. EP 434080 A1 19910626, 63 pp. DESIGNATED STATES: R: BE, CH, DE, ES, FR, GB,

IT, LI, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1990-125068 19901221. PRIORITY: US 1989-455219 19891222.

GI



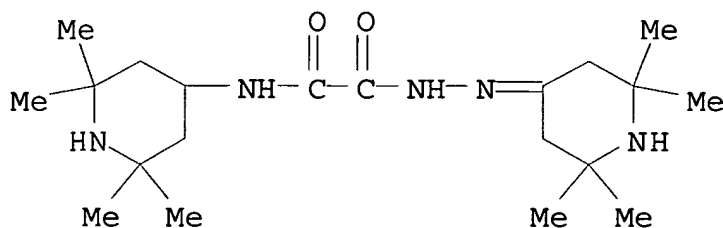
AB N-(2,2,6,6-Tetraalkyl-4-piperidiny)amic acid hydrazides I [R = H, OH, (substituted) C1-20 alkyl, (substituted) C5-12 alicyclyl, (substituted) C7-22 aralkyl, (substituted) C2-20 acyl, C(O)NR6R7, etc.; n = 1, 2; R1 = H, C1-4 alkyl; R2 = H, (substituted) C1-20 alkyl, (substituted) C6-14 aryl, 2-cyanoethyl, etc.; R3 = bond, (substituted) C1-20 aliph. diradical, (substituted) C6-12 arylene, etc.; diradical may contain 1-6, O, S, or NH groups, or R2NCOR3 = 5-membered lactam ring; R4 = H, (substituted) C1-20 alkyl, C5-12 alicyclyl, or C7-22 aralkyl; R5 = N:C(R11)(R12), NR13R14, or NR6QR15 when n = 1 or R5 = NR6QR17QNR6 when n = 2; Q = CO, CO2, CONR4, C(:S)NR4, SO2; R6,R7,R11,R12,R13,R14,R15 = R4, (substituted) C6-14 aryl; R15 = C13-21 2-(3,5-dialkyl-4-hydroxyphenyl)ethyl, etc. when Q = CO] were prepd. Thus, a soln. of Et N-(2,2,6,6-tetramethyl-4-piperidiny)oxamate, lauric acid hydrazide, and anhyd. MeOH was refluxed 6 h with removal of MeOH to give title hydrazide I (R = R1 = R2 = R4 = H, R3 = bond, R5 = NHCO(CH2)10Me) (II). Polypropylene samples contg. II passed Instron tests after 120 days exposure to UV-A light.

IT 136145-15-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as heat or light **stabilizer** for polymers)

RN 136145-15-8 HCAPLUS

CN Acetic acid, oxo[(2,2,6,6-tetramethyl-4-piperidiny)amino]-, (2,2,6,6-tetramethyl-4-piperidinylidene)hydrazide (9CI) (CA INDEX NAME)



- IC ICM C07D211-58
ICS C08K005-3435
- CC 27-16 (Heterocyclic Compounds (One Hetero Atom))
Section cross-reference(s): 36
- ST Tetraalkylpiperidinylic acid hydrazide light **stabilizer**;
heat **stabilizer** tetraalkylpiperidinylic acid hydrazide
- IT Heat **stabilizers**
Light **stabilizers**
((tetraalkylpiperidinylic acid hydrazides, for polymers)
- IT 136122-94-6P 136122-95-7P 136122-96-8P 136122-97-9P
136122-98-0P 136122-99-1P 136123-00-7P 136123-01-8P
136123-02-9P 136123-03-0P 136123-04-1P 136123-05-2P
136123-06-3P 136123-07-4P 136123-08-5P 136123-09-6P
136123-10-9P 136123-11-0P 136123-12-1P 136123-13-2P
136123-14-3P 136123-15-4P 136123-16-5P 136123-17-6P
136123-18-7P 136123-19-8P 136123-20-1P 136123-21-2P
136123-22-3P 136123-23-4P 136123-24-5P 136123-25-6P
136123-26-7P 136123-27-8P 136123-28-9P 136123-29-0P
136123-30-3P 136123-31-4P 136123-32-5P 136123-33-6P
136123-34-7P 136123-35-8P 136123-36-9P 136123-37-0P
136123-38-1P 136123-39-2P 136145-13-6P 136145-14-7P
136145-15-8P 136145-16-9P 136145-17-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as heat or light **stabilizer** for polymers)
- IT 136123-40-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as intermediate for heat or light **stabilizers**
for polymers)
- IT 60-34-4, Methyl hydrazine 67-64-1, Acetone, reactions 78-93-3,
Methyl ethyl ketone, reactions 80-17-1, Benzenesulfonyl hydrazide
95-92-1, Diethyl oxalate 103-71-9, Phenyl isocyanate, reactions
106-31-0, Butyric anhydride 108-24-7, Acetic anhydride 108-94-1,
Cyclohexanone, reactions 111-36-4, N-Butyl isocyanate 112-96-9,
Octadecyl isocyanate 122-60-1, 1,2-Epoxy-3-phenoxypropane
123-62-6, Propionic anhydride 584-84-9 592-82-5 613-94-5,
Benzoic hydrazide 822-06-0 826-36-8, 2,2,6,6-Tetramethyl-4-
piperidone 936-02-7, Salicylic hydrazide 1068-57-1, Acetic
hydrazide 1071-93-8, Adipic dihydrazide 1620-98-0 2325-01-1

2443-62-1 2461-15-6, 2-Ethylhexyl glycidyl ether 2619-88-7
 3538-65-6, Butyric hydrazide 3619-17-8 4098-71-9 4114-31-2,
 Ethyl carbazate 4130-54-5, Stearic acid hydrazide 5399-22-4,
 Lauric acid hydrazide 6304-39-8, Caprylic hydrazide 20478-70-0,
 Decanoic hydrazide 20478-71-1 22371-32-0 32687-77-7
 38291-82-6 106817-82-7 121714-93-0 122035-69-2 122035-71-6
 133080-98-5 136123-41-6 136123-42-7 136123-43-8

RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, in prepn. of heat or light **stabilizers**
 for polymers)

L39 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN

1972:435635 Document No. 77:35635 Acyl hydrazones of
 2,2,6,6-tetramethyl-4-piperidone for **stabilizing**
 polyolefins. Holt, Brian; Randell, Donald R.; Jack, James
 (Ciba-Geigy A.-G.). Ger. Offen. DE 2146692 19720323, 25 pp.
 (German). CODEN: GWXXBX. APPLICATION: DE 1971-2146692 19710917.

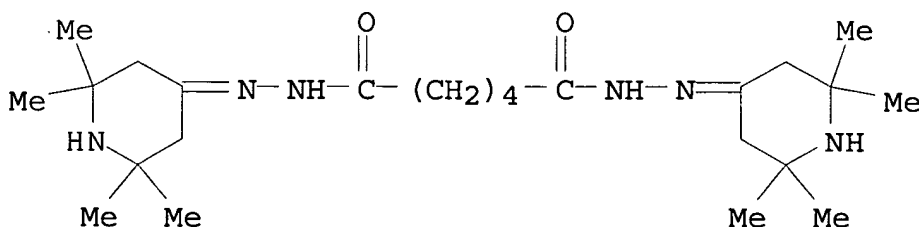
AB The hydrazones I (R = C1-20 alkyl, C5-12 cycloalkyl, aryl) or the
 corresponding hydrazones of dibasic acid hydrazides or their salts
 are UV light **stabilizers** for polyolefins. Refluxing
 C6H13CONHNH2 21.6, triacetoneamine 23.25, and MeOH 150 parts 24 hr
 gives 21 parts 2,2,6,6-tetramethyl-4-piperidone heptanoylhydrazone
 (I, R = C6H13) (II) [35186-96-0]. Exposure of 2 mm polystyrene
 [9003-53-6] sheets contg. 0.25 phr II to 1000 hr Xenotest 150
 illumination results in a yellowing factor of 1.0, compared with
 16.8 in the absence of II.

IT 37762-27-9 37762-28-0 37762-33-7

RL: PEP (Physical, engineering or chemical process); PROC (Process)
 (light **stabilizers**, for polyolefins)

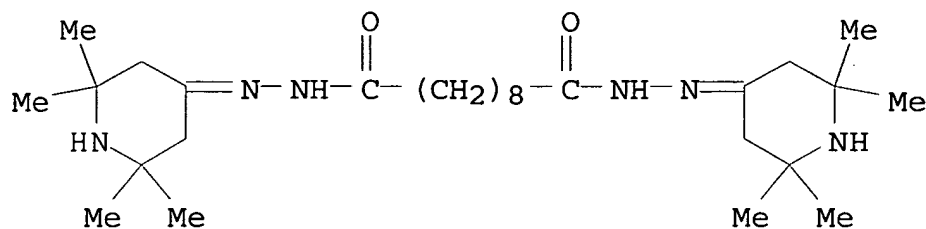
RN 37762-27-9 HCAPLUS

CN Hexanedioic acid, bis[(2,2,6,6-tetramethyl-4-
 piperidinylidene)hydrazide] (9CI) (CA INDEX NAME)



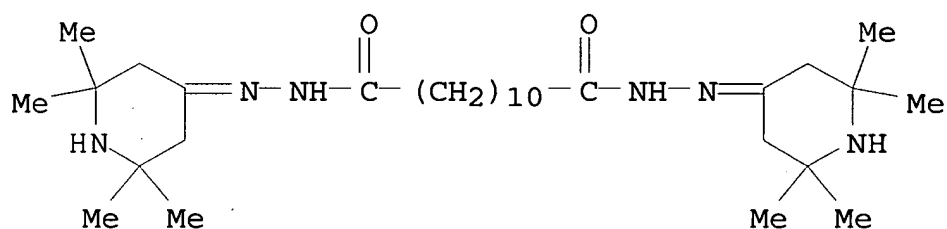
RN 37762-28-0 HCAPLUS

CN Decanedioic acid, bis[(2,2,6,6-tetramethyl-4-
 piperidinylidene)hydrazide] (9CI) (CA INDEX NAME)



RN 37762-33-7 HCAPLUS

CN Dodecanedioic acid, bis[(2,2,6,6-tetramethyl-4-piperidinylidene)hydrazide] (9CI) (CA INDEX NAME)



IC C07D

CC 36-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 27

ST UV **stabilizer** plastics; piperidone hydrazone
stabilizer; polystyrene UV **stabilizer**

IT Light **stabilizers**
(piperidoneacrylhydrazones, for polyolefins)

IT 9003-07-0 9003-53-6

RL: USES (Uses)

(light **stabilizers** for, piperidoneacrylhydrazones as)

IT 35186-96-0 **37762-27-9 37762-28-0 37762-29-1**

37762-30-4 37762-31-5 37762-32-6 **37762-33-7**

37762-34-8 37762-35-9 37762-36-0 37762-37-1 37762-38-2

37762-39-3 37762-40-6 37762-41-7 37762-42-8 37762-43-9

37835-03-3

RL: PEP (Physical, engineering or chemical process); PROC (Process)
(light **stabilizers**, for polyolefins)

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